



FIRST ANNUAL REPORT  
OF THE  
EXECUTIVE COUNCIL

1929—30

# IMPERIAL AGRICULTURAL BUREAUX.

## EXECUTIVE COUNCIL.

<i>Member:</i>	<i>Representing</i>
SIR ROBERT GREEN, M.C., LL.D. (Chairman) .. .. .	Scotland.
MR I. L. McDougall, C.M.G., (Vice-Chairman) .. .	Australia.
SIR CHARLES HOWELL THOMAS, K.C.B., C.M.G. . . . .	England and Wales.
DR G. SCOTT ROBERTSON, D.Sc.	Northern Ireland.
DR. J. H. GRIEDALE .. .. .	Canada.
MR J. GORST HUBBALL .. .	South Africa.
MR. NEVILL L. WRIGHT .. .	New Zealand.
DR J. H. HINCHCLIFF, Ph.D. ..	Irish Free State.
DR. D. CLOUSTON, C.I.E. .. .	India.
MR. B. E. WR .. .. .	South Rhodesia.
MR R. V. VED .. .. .	Islands, Protectorates and Mandated Terri- tories

SIR DAVID CHADWICK, C.S.I., C.I.E. (Secretary),  
2 Queen Anne's Gate Buildings,  
Dartmouth Street,  
LONDON, S.W.1.

FIRST ANNUAL REPORT  
OF THE  
EXECUTIVE COUNCIL  
OF THE  
IMPERIAL AGRICULTURAL BUREAUX

At their meeting on 21st July, 1930, the Executive Council of the Imperial Agricultural Bureaux adopted the following report, covering the first year's work of the Council—1st April, 1929, to 31st March, 1930.

*Inception of the Scheme.*

1. The Imperial Agricultural Research Conference of 1927 recommended the establishment of clearing stations for information in eight branches of agricultural science—Soil Science, Animal Nutrition, Animal Health, Animal Genetics, Animal Parasitology, Plant Genetics (for all crops other than herbage plants), Plant Genetics (for herbage plants) and Fruit Production. In all cases except that of the Bureau of Animal Health the Conference indicated the Research Institute at which these various "clearing stations" could, in its opinion, be advantageously located. The functions of a station were to collect, collate and disseminate among research workers in the Empire information of a scientific and technical character; to reply to enquiries on scientific and technical problems from agricultural departments and scientific workers in any part of the Empire; and particularly to facilitate intercourse among groups of workers on closely allied problems. It was proposed that funds for establishing and developing these new Imperial Bureaux and correspondence centres should be contributed by the Governments in the Empire, and that they should be administered by "an Authority representative of the contributing Governments."

2. The proposal met with general acceptance subject to satisfactory financial and administrative arrangements being evolved. Accordingly His Majesty's Governments in the United Kingdom, Canada, the Commonwealth of Australia, New Zealand, the Union of South Africa and the Irish Free State, the Government of India and—on behalf of the Colonies, Protectorates and Mandated Territories—the Colonial Office appointed representatives to attend a meeting to prepare a scheme. This meeting was held in London in November, 1928, under the Chairmanship of the Secretary of State for Dominion Affairs. The scheme then prepared was accepted and is in operation. That scheme, as well as a Memorandum issued later dealing with the relations between the Bureaux and Research Workers, is printed as an Appendix to this report.

*Constitution of Executive Council.*

3. The organisation which has been evolved presents several features of general constitutional interest. The various Governments contribute to a common fund from which the eight Bureaux are maintained. They do not contribute to the expenses of each Bureaux separately. The control of this fund and its administration vests in an Executive Council composed of nominees of the Governments. This Council elects its own Chairman and appoints its own officers. Thus, in a technical sphere of work—the collection and distribution of information in certain branches of agricultural science—the administrative direction of work for a common Empire purpose is vested in a Council composed of the nominees of the Governments and not in one of the Ministers of one of His Majesty's Governments acting on behalf of all Governments. One of the members of the Council is resident in Canada, another in Dublin, another in Belfast and yet another in Edinburgh. With the consent of the Treasury the Paymaster General acts as banker of the Council and the Comptroller and Auditor General audits the accounts.

*Directors of the Bureaux.*

4. The Head of each Research Institute at which a Bureau has been located has, with the consent of the authority controlling that Institute, been appointed Director of the Bureau. Care has been taken in every case to preserve the identities of the Bureaux separate from those of the Institutes to which they are attached. A statement giving the dates on which the Bureaux were opened, with their location and the names of the Directors and their chief assistants is printed with this report. The Executive Council desire at this stage to record their obligations to the Departments in Great Britain and to the Authorities controlling the various Institutes for their wholehearted assistance in working the scheme. To that help is due the rapid progress which has been made.

## II.—FINANCE.

*Contributions.*

5. Contributions for a five-year period amounting to £20,000 a year were asked for. Within the year an income of £19,795 was assured. It is possible that some if not all of the outstanding balance of £205<sup>1</sup> may be forthcoming during the current year. It is clear that the scheme has received wide and general support.

*Accounts 1929–30 and Estimates for 1930–31.*

6. A statement of the audited accounts for 1929–30 is printed with this report. The contributions actually received within the year amounted to £17,357 10s., being £2,437 10s. less than the total amount anticipated. This

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\* The Council have received later information that £75 out of this £205 will henceforth be paid.

balance is composed of the New Zealand contribution which was paid on the last day of the financial year and has been credited in the accounts for the following year, and a part of the Indian contribution, payment of which was asked to be deferred until 1930-31. The short expenditure in the year was due to the varying dates on which the Bureaux opened and the late appointment of staff in various cases. The total estimates for 1930-31 amount to £19,319.

#### *The Future.*

7. The eight Bureaux have been fully organised. Further increases in staff will be very few. Expenditure will, however, inevitably increase as a wider and more regular dissemination of information is secured and as personal contacts are promoted—both of which form the normal development of Bureaux work. In these respects the expenditure in the first year cannot be taken as normal.

### III.—PROGRESS IN 1929-30.

#### *Official Correspondents.*

8. Official correspondents to the various Bureaux resident in the various portions of the Empire were nominated by most of the Governments during the year. The Officers of the Bureaux are in consultation with them regarding the work and development of the Bureaux.

#### *Collection of Information.*

9. The year under report was necessarily one of organisation. The Institutes, wherever they possibly could, have placed accommodation at the disposal of the Bureaux on generous terms and have assisted them in numerous ways, as, for instance, by placing their libraries at their disposal and by allowing their officers to give advice and help on particular enquiries. Although the Bureaux only commenced operations during the year, several of them were able before the close of the year to commence the distribution (at first in roneo-ed form) of information on their particular branches of agricultural science.

#### *Soil Analysis.*

10. The Bureaux do not undertake research work. Their task is to collect and disseminate information on research work accomplished or in progress, to promote co-operative effort in the solution of common difficulties by putting research workers into touch with each other, and through the enquiries which reach them to indicate problems demanding investigation. As an instance of this last, it was clear that further investigation into the technique of the mechanical analysis of soils was required to enable workers in certain parts of the Empire to cope with the peculiar conditions prevailing in their areas and to render the results they obtain readily comparable with those attained in other parts of the Empire. Such an investigation is beyond the scope of a Bureau. The Empire Marketing Board, however, in

this case met the cost of such research and arranged that it should be undertaken at the University College of North Wales, Bangor.

### *Study Leave.*

11. The Imperial Agricultural Research Conference of 1927 considered the general conditions which should be observed to render study leave most profitable. It laid stress on the importance of preparing "well thought out courses of study or investigation" and of making adequate arrangements "well in advance." It was suggested that as the Bureaux developed they might assist, when desired, in such necessary preliminaries. In the past the present Directors of the Bureaux in their capacity as Heads of their Research Institutes have readily given such advice when consulted. Towards the end of the last official year they informed the Council that in their capacity as Directors of the Bureaux, they were in touch with both Empire and Foreign Research Institutes and were prepared, when requested, to advise regarding centres at which study leave for particular purposes might be spent and, so far as it was legitimate for them to do so, to endeavour to facilitate arrangements for such studies, provided always sufficient preparatory notice was given.

### *Direct Contacts between Research Workers.*

12 The Council and the Directors of the Bureaux lay special stress on promoting, in every way possible, direct contacts between officers of the Bureaux and research workers overseas. To further this end, an officer who has either received part of his early training or has served for some time in some portion of the Empire Overseas, has been selected in almost every case for the post of chief officer under the Director.

With the same object in view every effort is made to secure that those from the Empire Overseas who are interested in a particular science and happen to visit the United Kingdom are invited to visit and meet the Officers of the particular Bureaux in which they are interested. The High Commissioners for the Dominions and the Colonial Office have assisted the Bureaux greatly by advising them of the presence of such visitors in the United Kingdom. The utility of the Bureaux depends greatly on establishing personal contacts with workers overseas, and the Council hope that research workers who contemplate visiting the United Kingdom in any year will be encouraged to inform the appropriate Bureau of their intention and that they will be able to visit the Bureau during their stay. They will be very welcome.

The meeting in the past year of the British Association in South Africa and of the Pan-African Agricultural and Veterinary Conference also in South Africa afforded to the Chairman of the Council and to those Directors of the Bureaux who were present, opportunities for forming valuable personal contacts and for discussing the work and future of the Bureaux. The Chairman also toured the East African Colonies and one Director visited Canada.

## IV.—CONCLUSION.

*Common Objective.*

13. Although the Bureaux serve common purposes, it will be reasonable to expect that they will develop somewhat differently. In some subjects, such as those of Animal Health and Soil Science, the volume of literature is large and workers numerous; in others, such as those of Animal Genetics and Agricultural Parasitology, the workers are fewer and research in those subjects is not so far developed. Each Bureau is being encouraged to develop along the lines which to it and to its official correspondents appear to be the most beneficial to Empire workers in that particular branch of science. To this end each Bureau has sought the aid of its official correspondents in moulding its work. All research workers in the Empire can contribute greatly to the utility of the Bureaux by suggestions and criticism. Both are welcome. The Council know that it is the personal desire of each Director, as also of the officers working under him, to establish direct contact with those engaged in research work overseas in their particular subjects, so as to be able to render to them the maximum assistance. Although diversity in detail in the different Bureaux must be expected, none the less, they have a common object—service to the workers in the Empire on agricultural science—which their association under a common Empire Council emphasises.

*Thanks to Directors.*

14. The Council have been fortunate in securing the Heads of the various Research Institutes as Directors of the Bureaux. They are men of wide experience and scientific distinction. Their association with the Bureaux gives confidence in the developments of the new organisations. Calls upon their time are many, but each one takes a lively interest in the objects and work of the Bureau attached to his Institute. Through the stimulus thus provided, through daily contact with those in the Institute actively engaged in research and through the introduction to other workers which the location of a Bureau at a well-known Research Institute automatically ensures, the officers of the Bureaux have been well started on a living task. The Council regard these associations and close relationship with workers in other parts of the Empire as forming the sure basis for future usefulness.

*Meetings of Council.*

15. Much of the current work of the Council is conducted by means of the circulation among its Members of papers for orders, but in addition three full meetings of Council have been held during the year, besides a formal Conference with Directors. Members of Council have kept in touch with their officers by visits to the Bureaux, but the general Conference with Directors proved so valuable that it is proposed to hold it periodically.

ROBERT GREIG,  
*Chairman.*



EXECUTIVE COUNCIL, IMPERIAL AGRICULTURAL BUREAUX  
ACCOUNT OF RECEIPTS AND PAYMENTS FOR THE YEAR ENDED 31ST MARCH, 1930

<i>Receipts.</i>			<i>Payments</i>		
	£	s d		£	s. d
Contributions from the Governments of the Empire ...	17,357	10 0	Working Expenses of Imperial Bureau of—		
Miscellaneous Receipts .	6	4 5	Soil Science (Rothamsted)	2,066	1 9
			Animal Nutrition (Aberdeen)	2,013	1 7
			Animal Health (Weybridge)	1,507	10 1
			Animal Genetics (Edinburgh)	1,432	3 1
			Fruit Production (East Malling) ...	1,208	1 3
			Plant Genetics (Herbage) (Aberystwyth) ...	948	18 0
			Plant Genetics (Non-Herb- age) (Cambridge) .	444	12 3
			Agricultural Parasitology (St Albans) ...	970	0 1
			General Secretarial Expenses ..	298	1 4
				<u>£10,888</u>	<u>9 5</u>
			Purchase of £4,000 5 per cent Conversion Stock, 1944/64	4,152	16 0
			Balance—		
			H M Paymaster-General ...	£1,981	5 3
			In hand	350	7 7
				<u>2,331</u>	<u>12 10</u>
			Less Suspense Accounts	9	3 10
				<u>2,322</u>	<u>9 0</u>
Total ..	<u>£17,363</u>	<u>14 5</u>	Total ...	<u>£17,363</u>	<u>14 5</u>
Investment at 31st March, 1930 —					
£4,000 5 per cent Conversion Stock, 1944/64, at cost, £4,152 16s					

V. H. BOYSE,  
*Accountant*

D. T. CHADWICK,  
*Secretary.*

I have examined the above Account. I have obtained all the information and explanations that I have required, and I certify, as the result of my audit, that in my opinion the above Account is correct

MALCOLM G. RAMSAY,  
*Comptroller and Auditor General*

EXCHEQUER AND AUDIT DEPARTMENT,  
18th July, 1930

## DATES OF OPENING OF THE BUREAUX.

Date of opening	Bureau of	Location	Director	Deputy Director or Chief Officer in direct charge of Bureau
April 1st, 1929	Animal Nutrition ..	Rowett Research Institute, Bucksburn, Aberdeen, Scotland	Dr J B Orr, D S.O., M C, M D, D.Sc	Yet to be appointed
	Animal Genetics ..	Animal Breeding Research Department, Edinburgh University, Scotland	Professor F E Crew, M D, D Sc, Ph D.	Mr Eldon Moore
	Fruit Production ..	East Malling Research Station, East Malling, Kent, England	Mr R. G Halton, M A	Mr D Akenhead, M A, B Sc
May 1st, 1929	Soil Science	Rothamsted Experimental Station, Harpenden, Herts, England.	Sir John Russell, O B E, D Sc, F R S	Dr A F Joseph, D Sc, F I C.
	Plant Genetics (Herbage plants)	Welsh Plant Breeding Station, Aberystwyth, Wales	Professor R. G Stapledon, M.B.E, M A	Dr R O Whyte, Ph D
June 1st, 1929	Agricultural Parasitology	Institute of Agricultural Parasitology, St Albans, England	Professor R T Leiper, M.D., D Sc, F R S	Dr B G Peters, M Sc, Ph D.
October 1st, 1929	Animal Health ..	Veterinary Research Laboratory, Weybridge, Surrey, England	Dr W H Andrews, D Sc, M R C V S	Mr W A Pool, M R C V S
	Plant Genetics (for crops other than Herbage)	Plant Breeding Institute, Cambridge University, England	Sir Rowland Biffen, M A, F R S	Dr P S Hudson, Ph.D

DAVID CHADWICK,

*Secretary to the Executive Council.*

## APPENDIX.

Nothing in these Memoranda affects the Imperial Bureaux of Entomology or Mycology which were organised prior to the Imperial Agricultural Research Conference of 1927. These two Bureaux continue independently in accordance with their existing organisations.

### Memorandum I.

The scheme embodied in this memorandum was agreed at a Conference in London in November, 1928, attended by representatives of Governments of the Empire. It has been adopted by the Governments and by the Governing Bodies of the Institutes mentioned in it.

#### THE SCHEME.

1 The purpose of Imperial Agricultural Bureaux is to act as effective clearing houses for the interchange of information of value to research workers in agricultural science throughout the various parts of the Empire, and for this purpose they should discharge the following functions :

#### FUNCTIONS OF A BUREAU.

##### *A—Collection of Information*

2—(i) A bureau should maintain an index of research being carried out in different parts of the Empire and as far as practicable in foreign countries

(ii) A bureau should begin by collecting, abstracting, and collating information from all sources bearing on the most important problems under investigation in different parts of the Empire, but care should be taken to avoid the collection of uncorrelated data

(iii) A bureau should keep itself informed of the general progress of research work within its province in different parts of the Empire.

(iv) A bureau should in appropriate cases summarise available statistics where these are of importance in connection with its work.

##### *B—Distribution of Information.*

(i) A bureau should supply, on request, information within the scope of its work to officials and advisory officers, in all parts of the Empire. Where a bureau is not in possession of such information it should endeavour to put the enquirer in touch with the best source

(ii) A bureau should supply, where feasible, to research workers in the Empire, on request, information including bibliographies and photostat prints of articles on specific problems

(iii) A bureau should issue information along such lines as may be deemed desirable by the Executive Council

##### *C.—Publication*

The general distribution of information (apart from the distribution of information to particular individuals) is part of the duties of a bureau, but the publication of special monographs should only be made with the approval of the Executive Council, and though in many cases it may ultimately be found desirable to establish a journal such publication should not, on account of its permanent cost, be undertaken until the bureau has become fully established and then only on the authorisation of the Executive Council

##### *D.—General.*

A bureau should not undertake any laboratory or field research work involving expense but, in addition to its main function of facilitating the exchange of information, a bureau will be in a

position to be of service to research workers in various ways and especially along the following lines :—

- (i) By facilitating exchange of workers, especially by supplying information in regard to centres between which exchange would be most profitable
- (ii) By facilitating, through correspondence or otherwise, meetings at the most convenient centres of workers interested in the same problems in different parts of the Empire.
- (iii) By facilitating the exchange of experimental material for research purposes between institutions or workers in different parts of the Empire
- (iv) By supplying information on the best centres for post graduate study, the best sources of supply of apparatus or equipment and any other such information of a general character which might be of service to institutions or individual workers.

#### FUNDS FOR THE BUREAUX.

3. The funds for the bureaux will be provided by contributions from the Governments of the Empire.

#### A COMMON FUND

4 These contributions will form a common fund for all the bureaux and no part should be earmarked for the service of a particular bureau.

#### THE EXECUTIVE COUNCIL.

5. The control of the fund, its distribution among the bureaux and the general supervision of the bureaux will rest with the Executive Council of the Imperial Agricultural Bureaux appointed by the Governments of the Empire on the general lines suggested by the Imperial Agricultural Research Conference of 1927.

6 This Council is charged with administrative duties and should consist of one representative of each of the following countries (if and so long as they contribute to the fund) : England and Wales ; Scotland ; Northern Ireland , Canada , Australia ; Union of South Africa ; New Zealand ; Irish Free State ; India ; the territories associated with the Colonial Office ; Southern Rhodesia ; and Newfoundland.

#### NUMBER AND LOCATION OF BUREAUX.

7. Eight bureaux should forthwith be established under the following names and for the present should be attached to the following institutes :—

<i>Names.</i>	<i>Location</i>
The Imperial Bureau of—	Attached to the—
(1) Soil Science .. ..	Rothamsted Experimental Station, Harpenden, Herts, England.
(2) Animal Nutrition .. ..	Rowett Research Institute, Bucksburn, Aberdeen, Scotland.
(3) Animal Health .. ..	Veterinary Research Laboratory, Weybridge, Surrey, England
(4) Animal Genetics .. ..	Animal Breeding Research Department, Edinburgh University, Scotland.
(5) Agricultural Parasitology .. ..	Institute of Agricultural Parasitology, nr St. Albans, England
(6) Plant Genetics For crops other than herbage plants	Plant Breeding Institute, Cambridge University, England
(7) Plant Genetics. For herbage plants.	Welsh Plant Breeding Station, Aberystwyth, Wales.
(8) Fruit Production .. ..	East Malling Research Station, East Malling, Kent, England.

8. The first three of these, namely, the Imperial Bureaux of Soil Science, Animal Nutrition and Animal Health should for the present be organised on a larger scale than the remaining five.

#### DIRECTORS AND DEPUTY DIRECTORS OR CHIEF ASSISTANTS.

9 The Head of the Research Institute will be in each case *ex-officio* Director of the Imperial Bureau attached to his Institute and he will be entitled " Director of the Bureau." In each case there should be at least one whole-time officer paid from the Council's funds, who should be the deputy director or chief assistant for bureau work.

## OFFICIAL CORRESPONDENTS.

10. Specialists in the appropriate sciences should be nominated as official correspondents by the Governments represented on the Executive Council—one by each Government for each bureau

11. In each country the representative of the Bureau will be the Official correspondent to whom the Director may turn for such help as he may require and from whom he may obtain suggestions regarding the work and activity of the bureau.

12. It is expected that these correspondents will make it their duty to take a lively interest in the functions and work of the bureau and facilitate its activities in the interest of research workers in the Empire as a whole

13. The periodical meetings of the Imperial Agricultural Research Conference and any special meetings of those engaged in a particular science will afford opportunities for adjustment of differences of view regarding the work to be undertaken by the bureau. In case of necessity, and when such opportunities are not likely to occur for some considerable time, the Director should refer the case to the Executive Council.

## APPOINTMENTS OF STAFF AT THE BUREAUX

14. The staff of the Bureau in receipt of salaries of £300 a year or over will be selected in consultation with the Director and will be appointed by the Council with the prior consent of the Government Department or Governing Body controlling the Research Institute

15. The staff in receipt of salaries below £300 will be appointed on behalf of the Executive Council by such method as may be acceptable to the governing authority of the Institute.

16. The scales of pay of all staff will be fixed and sanctioned by the Executive Council in consultation with the Governing Bodies of the Institutes and the Ministry of Agriculture for Institutes in England and the Board of Agriculture for Scotland, for those in Scotland

17. The staff of the Bureau will be under the disciplinary control of the Director of the Station, and the exercise of such control shall be governed by such rules and procedure as may be agreed between the Governing Authority and the Executive Council.

## HONORARIA TO DIRECTORS.

18. Bureaux will receive great assistance from the Heads of the Institutes who become Directors of the Bureaux and the work of establishment and supervision will make a considerable call on their time and attention. The executive Council recognise this fact and whilst, from the nature of the case, they are unable to remunerate the Heads of these Institutes directly, they desire that the Governing Authorities of the various Institutes be requested to agree that the Heads of their Institute receive from the Executive Council honoraria at a flat rate of 100 guineas a year, which may be described as allowances, honoraria, or remuneration for literary work as the Governing Authority of each Institute prefers

## PROPERTY OF THE BUREAUX.

19. Movable property bought from Bureau funds should be brought to inventory and should remain the property of the Bureaux.

## ACCOUNTS AND FINANCIAL MACHINERY.

20. The accounts of a bureau are to be kept distinct from those of the Institute to which it is attached

21. The Executive Council will submit annually to the contributing Governments a statement of receipts and expenditure supported by properly audited accounts. Such statement will cover both the expenditure by the Bureaux and expenditure incurred directly by the Executive Council

22. The accounting year will be for the period ending 31st March each year.

23. Detailed estimates for expenditure in the forthcoming year should be forwarded by the Director of a Bureau to the Secretary of the Executive Council not later than 1st October of each year. These estimates should be in a form to be settled, but should clearly distinguish between the salaries of the superior staff, those of assistants and clerical staff and miscellaneous charges, with reasons for any anticipated unusual expenditure.

24. The rates of pay of staff, charges for rent or new expenditure exceeding £25 not covered in the estimates should not be varied or incurred without the prior sanction of the Executive Council. Otherwise within the totals of the grant for clerical assistance and of the miscellaneous grant the Director has power to reappropriate between subheads during the course of the year.

25. His Majesty's Treasury in Great Britain will be requested to arrange for the opening of a pay account entirely separate from those of His Majesty's Government in Great Britain into which all contributions and from which all payments will be made. They will also be requested to arrange for the audit of all expenditure by the Comptroller and Auditor General under Section 3 of the Exchequer and Audit Act, 1921, under which provision could be made for the report on the audit to be made only to the Executive Council.

26. Advances would be made each quarter by the Secretariat of the Executive Council to the responsible finance officers at each Institute sufficient to cover the estimated quarter's expenditure. Out of that advance such officers would pay all authorised expenses of the Bureau.

27. Immediately at the close of the quarter the finance officer of the Institute would forward to the Secretary of the Executive Council an account in proper form supported by receipts for all expenditure on salaries, wages, etc., and by vouchers for all miscellaneous expenditure. He would be given credit in the central account in the office of the Executive Council for such amount as examination of those vouchers indicated. His requirements for the next quarter would be stated and a further imprest given to place him in funds for the next quarter.

28. All accounts would be brought together in the office of the Executive Council, and these, together with the direct expenditure by the Council would be audited by the Comptroller and Auditor General who would make his report to the Executive Council.

#### TRAVELLING ALLOWANCES.

29. Except in special cases and under special sanction of the Council travelling and subsistence allowances of officers subordinate to the Council will be at the rates appropriate to the Research Institute concerned. Travelling and other allowances of members of the Executive Council will be borne by the Governments appointing them.

#### OFFICE ESTABLISHMENT OF THE COUNCIL

30. The Council will appoint and dismiss its own Secretary, who will obtain the approval of the Council for the general conduct of its work.

31. The cost of such secretarial work as also any charges for audit will be a charge on the common fund.

#### CONTRIBUTIONS.

32. As the fund relies solely on contributions from Governments these should become due on the 1st April for the financial year to which they relate.

33. Payments should be made to the Secretary of the Executive Council for credit of the account of the Council at His Majesty's Paymaster General's Office

#### BUSINESS OF THE COUNCIL.

34. The following must go before the Council for their consideration :—

- (a) detailed estimates of the Bureaux,
- (b) the Auditor General's reports and the annual report of the Executive Council
- (c) all proposals for new expenditure,
- (d) all appointments within the Council's cognisance.

35 Between meetings of the Council the Chairman, or (if the Chairman is not available) the Vice-Chairman and any two members of the Council may deal with urgent business but their action must be reported forthwith to the other members of the Council and must be submitted for confirmation to the next meeting of the Council. Ordinarily, expenditure which will involve commitments beyond the current financial year should be deferred for consideration at a full meeting of Council.

36. The Council will ordinarily meet in November and July in November for the consideration of the Budget and Estimates and in July for consideration of the report and accounts.

37. The Offices of the Council are situated at 2, Queen Anne's Gate Buildings, London, S.W. 1.

38 Sir Robert Greig, M.C., LL.D., is appointed Chairman for a period of two years.

Mr. F. L. McDougall, C.M.G., is appointed Vice-Chairman.

The Chairman, Vice-Chairman and Mr. R. V. Vernon are appointed to a panel each of whom can sign pay orders with the Secretary.

Sir David Chadwick, C.S.I., C.I.E., is appointed Secretary.

Mr. W. R. Black, M.B.E., is appointed liaison officer with the Ministry of Agriculture and Fisheries.

#### MISCELLANEOUS.

39 Contracts of employment where necessary will run in the names of the Chairman and Secretary for the time being on behalf of the Council.

40. All appointments are for the time being to be temporary.

41. All Governments are requested to communicate to the Secretary of the Council the names of the official correspondents appointed to the different bureaux.

42. In the event of a Member of the Council being unable to attend a meeting the name of a substitute shall be communicated to the Secretary.

## Memorandum II.

### RELATIONS BETWEEN THE BUREAUX AND RESEARCH WORKERS WITHIN THE EMPIRE.

These eight Bureaux are being organised on the plan approved at the Imperial Agricultural Research Conference, 1927. Their functions are set out in Memorandum I.

#### WHOM THE BUREAUX ARE DESIGNED TO ASSIST.

2. The Bureaux are designed to assist research workers in the Empire in certain specified branches of agricultural science. These research workers may be on the staff of agricultural departments, or they may be members of research institutes, whether supported by the State or not, or they may be individuals of recognised scientific standing engaged in research on their own account.

3. It is no part of the function of a Bureau to answer enquiries from the general public or to give advice on the local problems confronting those engaged in agriculture, stock raising, or fruit growing.

#### CHARACTER OF THE ASSISTANCE THE BUREAUX CAN GIVE.

4. The functions of the Bureaux are laid down in paragraph 2 of Memorandum I. Special attention is drawn to the fact that the Bureaux do not undertake Research. It is not their function to initiate research directly.

5. As the Bureaux accumulate information on their respective subjects, it is expected—

- (i) That they will discharge all the functions assigned to them and in particular be able to supply research workers with
  - (a) references to the work already done and available on particular problems ;
  - (b) the titles of publications and references to articles contained therein dealing with the information applied for ; or summaries of the articles, or if necessary reproductions of the articles ;
  - (c) similar information regarding the technique which has been adopted in investigating particular problems ;
- (ii) That they will consult research workers in the Empire, as occasion arises, on branches of research in which they have special knowledge ; and
- (iii) That they will promote correspondence and contact between research workers engaged in similar or allied lines of enquiry

#### NEED FOR SUPPORTING THE BUREAUX.

6. No Bureau can discharge such functions from its inner consciousness. It depends for its utility on the active support of research workers throughout the Empire. The measure of its opportunity is set by the support it receives from research workers and the use they make of it.

#### NATURE OF THE SUPPORT REQUIRED.

7. To enable it to discharge its functions each Bureau should—

- (a) maintain a register of the Institutes or stations at which research work in which it is interested, is carried on ;
- (b) maintain a register of research workers in the Empire in the branch of science in which it is interested ;
- (c) receive information regularly of the problems in its particular branch on which research workers are engaged ;
- (d) receive information of problems in its particular branch, which are deemed to be of practical local importance but which cannot be investigated immediately ;
- (e) receive regularly and immediately copies of the published results of research work in the branch of knowledge in which the Bureau is interested.

#### OFFICIAL CORRESPONDENTS.

8 It is expected that research workers will increasingly correspond directly with the Bureaux on scientific and technical matters

9 In order to save both research workers throughout the Empire and the Bureaux from misunderstandings and unreasonable requests, the Imperial Agricultural Research Conference, 1927, recommended that individuals in the various parts of the Empire outside the United Kingdom, familiar with and closely associated with the research work in each of the different branches of knowledge for which Bureaux are being started, should be nominated as official correspondents to the various Bureaux.

10. The position and general functions of these official correspondents are laid down in paragraphs 10 to 13 of Memorandum I.

#### NUMBER OF OFFICIAL CORRESPONDENTS.

11. Wherever, in the Empire, scientific research is actively in progress in regard to any of the eight branches of agricultural science for which Bureaux are being established, it is hoped that official correspondents resident within the territory will be appointed to the appropriate Bureau. But it is not contemplated that correspondents for each of the eight Bureaux will be nominated at once by every Government. It may happen that in certain localities (especially in some of the territories forming part of the Colonial Empire) the agricultural work at present in progress is mainly administrative in character and scientific research is only partially developed ; or that



scientific research into certain branches of knowledge for which Bureaux are being formed has not yet been instituted. In those cases, opportunities for nominating local official correspondents from each locality for each Bureau do not exist. It is important, however, that someone in touch with the local agricultural administration and conditions be nominated as official correspondent, as the person to whom the officer in charge of the Bureau can turn for assistance or advice.

#### SELECTION OF OFFICIAL CORRESPONDENTS

12 It is hoped that nominations of official correspondents will be made with special attention—

- (a) to furthering the utility of the Bureaux,
- (b) to ensuring as far as possible both smooth administration and trained knowledge of the subject dealt with by a Bureau,
- (c) to restricting as far as possible the number consonant with securing adequate representation for each Bureau.

In explanation of the last suggestion, it is expected that, although the territories associated with a Government may be divided into different States or Provinces with their own administrations, one person will be able to discharge the functions of official correspondent for a particular Bureau for all the territories associated with that Government.

#### MATTERS ON WHICH THE BUREAUX MUST KEEP OFFICIAL CORRESPONDENTS INFORMED

13 In particular, Deputy Directors or Chief Officers in charge of a Bureau are directed—

- (a) to consult their official correspondent in order to maintain correct and up-to-date registers of research workers in the Empire, and of the problems on which they are engaged;
- (b) to consult their official correspondent in a country and obtain his assistance in securing regularly and promptly after publication in that country, copies of journals, memoirs, etc., containing scientific information on the subjects of interest to the Bureau;
- (c) to refer to the official correspondent enquiries from primary producers which obviously relate to the practice of agriculture, stock raising, or fruit growing;
- (d) to refer to the official correspondent matters raised in correspondence from research workers which appear to involve questions of policy or administration so as to enable the official correspondent to consult thereon the appropriate authority in his territory.

14 In general, Deputy Directors and Chief Officers in charge of Bureaux are expected to keep in touch with their official correspondents, who in their turn are expected to aid the Bureaux by all means in their power, by advice, suggestion, and explanation of difficulties which may arise.

#### DIRECT CORRESPONDENCE BETWEEN OFFICERS OF THE BUREAUX AND RESEARCH WORKERS

15. It is hoped that with the due observance of the conditions set out in paragraph 13 above officers in charge of Bureaux will correspond directly with all research workers and enquirers in the Empire on matters of scientific and technical interest.

#### SUGGESTIONS OF NEW LINES OF ENQUIRY.

16 As a result of the collection of information regarding research in progress in different parts of the Empire it may happen that the Bureau is able to suggest co-operation in a particular enquiry between workers in two or more parts of the Empire, or that certain work might advantageously be undertaken in a particular part of the Empire to supplement or complete work being done elsewhere. In that event the Director of the Bureau should state the case for

such research work fully and submit it to the official correspondents in the countries interested, for their consideration. The statement should not be sent to individual research workers or particular Institutes as such.

#### NO OFFICIAL CORRESPONDENTS IN THE UNITED KINGDOM.

17. The appointment of official correspondents to the Bureaux is not deemed necessary at present in the United Kingdom, where geographical considerations do not seriously limit the opportunities for personal discussion.

#### CO-OPERATION BETWEEN BUREAUX.

18. Bureaux will co-operate with each other in supplying information to enquirers.

#### INITIATION OF WORK.

19. No Bureau can cover its whole field at once. It should begin (a) by getting into touch with research workers in its own line, and (b) by collecting, abstracting and collating information from all sources bearing on some of the most important problems under investigation in different parts of the Empire.

In both cases it will invoke the assistance of its official correspondents. The list of Research workers in the Empire, published as a result of the Imperial Agricultural Research Conference of 1927, will assist the Bureau in making contacts, and in many cases the knowledge already possessed by the Director of the problems now before research workers in the Empire will enable a preliminary selection of subjects to be made.

#### REPORTS OF THE ACTIVITIES OF THE BUREAUX.

20. As the Bureaux become established, the Executive Council will consider the most effective means of informing research workers in agricultural science within the Empire of the activities and progress of the organisation.



## ADDRESSES OF BUREAUX.

IMPERIAL BUREAU OF SOIL SCIENCE,

Rothamsted Experimental Station, Harpenden, Herts.

IMPERIAL BUREAU OF ANIMAL NUTRITION,

The Red Library, Rowett Research Institute, Bucksburn, Aberdeen.

IMPERIAL BUREAU OF ANIMAL HEALTH,

Veterinary Laboratory, New Haw, Weybridge, Surrey.

IMPERIAL BUREAU OF ANIMAL GENETICS,

King's Buildings, West Main Road, University of Edinburgh, Scotland.

IMPERIAL BUREAU OF AGRICULTURAL PARASITOLOGY,

Winches Farm, Hatfield Road, St. Albans, Herts.

IMPERIAL BUREAU OF PLANT GENETICS (FOR CROPS OTHER THAN HERBAGE),

School of Agriculture, Cambridge.

IMPERIAL BUREAU OF PLANT GENETICS (HERBAGE).

Agricultural Buildings, Alexandra Road, Aberystwyth.

IMPERIAL BUREAU OF FRUIT PRODUCTION,

East Malling Research Station, East Malling, Kent.